

### **In the Specification**

Please cancel the previous version of the Abstract and replace with the substitute Abstract as follows:

A chitosan enhanced dewatering bag reduces the amount silt, sedimentation and suspended solids from incoming water. The dewatering bag includes a first permeable membrane having a first open end or opening, and one or more applications of chitosan located within the bag. A second permeable member may be attached to the first permeable membrane so that it defines at least a portion of the outer surface of the dewatering bag. A baffle wall may also be located inside the dewatering bag to reduces the access of silt and sediment to this second permeable membrane. Fluid entering the first opening can readily flow through the dewatering bag, while unwanted dirt and other solids are impeded from such flow.

Please amend the paragraph on page 9, line 24 to page 10, line 4 of the Specification as follows:

Referring again to Figure 2, a particularly preferred application for chitosan is illustrated. Cakes or bars of a gel form of chitosan 111 are inserted and sewn into a permeable fabric sock 112, and preferably each gel cake or bar is sewn into a separate compartment 113 within the fabric sock. This fabric sock containing multiple chitosan gel bars comprises a loop 114 attached to a distal end of the sock, such that the entire sock may be attached, connected or otherwise anchored to a separate structure. As depicted in Figure 2, a fabric sock containing one or more chitosan gel bars is attached or anchored to the inside of the inlet spout at first end or opening 102 by straps 115 sewn into the inner wall of the inlet spout and D-rings 116 connecting these straps with loop 114 of the fabric sock. Alternatively, or in addition to this location, one or more fabric socks may also be connected to any other location on the inner surface of first permeable membrane 101, ~~the inlet spout first end~~ 102, or ~~outlet spout~~ second end 103. Attachment of a fabric sock inside the inlet spout is particularly preferred, however, as such a placement ~~maximized~~ maximizes the exposure of incoming water to chitosan.

Please amend the paragraph on page 10, lines 5-22 of the Specification as follows:

Referencing Figure 3, the particularly preferred embodiment of Figure 2 is illustrated during operation and in a side cross-sectional view. Although dewatering bags are typically flat or deflated when not in use, dewatering bag 100 is depicted as having expanded as incoming water has filled the bag. Fabric sock 112 containing one or more chitosan gel bars

is centrally anchored within the inlet spout at first end or opening 102, such that the entire sock becomes centrally and horizontally suspended within the inlet spout and inner space of the dewatering bag while any substantial fluid flow enters the inlet spout and dewatering bag. Although the fabric sock containing one or more chitosan gel bars may be anchored or located in other ways or configurations, exposure of incoming water to chitosan is greatly maximized in this manner, as the chitosan becomes more evenly disbursed along the incoming fluid flow. Alternatively, the fabric sock may be anchored further into the inlet spout, or even inside the dewatering bag but near the inlet spout, in order to realize a significant exposure of chitosan to incoming fluid. Because the increased water clarification capabilities arising due to chitosan cause pollutants, silt and sediment to coagulate much more rapidly, these enlarged suspended solids are much more prone to settle to the bottom of the dewatering bag or be retained by its permeable membrane. Accordingly, the dewatering bag becomes clogged at a much faster rate, such that additional devices for dealing with this phenomenon are desired.

Please amend the paragraph on page 11, lines 11-28 of the Specification as follows:

Referring now to Figure 4, the particularly preferred embodiment of Figures 2 and 3 is illustrated in a partially cut-away top perspective view. Baffle wall 120 extends from one side of dewatering bag 100 to an opposing side, such that this baffle wall separates interior space 104 into a first interior space 108 and a second interior space 109. Preferably, the inlet spout at first end or opening 102 directs fluid into first interior space 108, while second permeable membrane 107 passes fluid out of said second interior space 109, such that most silt, sedimentation and suspended solids are retained within first interior space 108. Baffle

wall 120 also preferably extends from the bottom of the dewatering bag to the top, although other embodiments where the baffle wall stops short of the top or from either side of the dewatering bag are also contemplated. In a particularly preferred embodiment, baffle wall 120 is integrally formed with first permeable membrane 101, such that the baffle wall also comprises a non-woven geotextile fabric capable of passing fluid. One example of such an embodiment can best be seen in Figure 3, whereby a cross-sectional view of dewatering bag 100 illustrates a continuous first permeable membrane 101 comprising the entire bottom surface of the bag, rising up through the side of the bag nearest the inlet spout at first end or opening 102, continuing onward to comprise most of the upper surface of the bag, and finally ending by comprising baffle wall 120. The bottom edge of this baffle wall is then sewn to the dewatering bag along the bottom surface of the bag.

Please amend the paragraph on page 11, line 29 – page 12, line 12 of the Specification as follows:

Referring again to Figure 4, baffle wall 120 comprises one or more enlarged openings 121 communicating first interior space 108 with second interior space 109. Openings 121 are preferably toward the upper part of baffle wall 120, such that the amount of silt and sediment passing from first interior space 108 through the baffle wall and into second interior space 109 is reduced. In this manner, fluid is able to more readily flow through the dewatering bag and be expunged, but unwanted dirt and other solids are impeded from accompanying such increased flow. The size of openings 121 may be varied as desired, and it is contemplated that an increased number of openings may result in a correspondingly

reduced diameter for each opening with little change in the ability of fluid to pass through the baffle wall. In applications where clogging and reduced fluid flows are to be especially avoided, such openings may be maximized up to the point where the sum of the cross-sectional areas of all openings are equal or substantially similar to the cross-sectional area of the inlet at first end or opening 102. Such dimensions would maximize the amount of fluid that could pass through the baffle wall, in that the output of first interior space 108 would then match its input. Reduced diameters for openings 121 are preferable, however, where greater filtration and clarification of passed water is ultimately desired.

Please amend the paragraph on page 12, lines 13-23 of the Specification as follows:

Another feature of the present invention is the ability to clean out and reuse the inventive dewatering bags rather than disposing of them after they become filled with silt and sedimentation. Accordingly, one or more zippers (~~not shown~~) traversing one or more outer edges or seams of the dewatering bag are provided. When such zippers are unzipped, either a portion or all of the top of the dewatering bag may be distanced apart from the bottom of the dewatering bag, such that the interior space of the bag is readily accessible. In this manner, accumulated silt, mud and debris may be removed from the dewatering bag and disposed of in a responsible manner, such that the bag is emptied and ready for reuse. Any application of chitosan, such as one or more fabric socks containing bars of chitosan gel, may also be replaced or renewed as well. The dewatering bag may then zipped back up and reused again as desired.